Training your robot

What you need

- **Two-person activity**
- **Something to move e.g. a book**
- **Space to move in e.g. a classroom**

Computational Thinking – Sequence of Instructions

The idea of the activity is to show that robots need many lines of precise coding to do any simple task.

What to do

- One person pretends to be a robot
- The other person gives instructions e.g. pick up a toy or put a book on a table.
- Instructions could include $\frac{1}{4}$ or $\frac{1}{2}$ turns left or right e.g. walk two steps forward, do a $\frac{1}{4}$ turn left, walk one step forward, pick up the book.

Things to remember

The "robot" should not move unless they have been given an instruction to do so. For example if the "robot" is not told which arm to lift they do nothing. If the "robot" is told to move forward but not told how many steps the robot just keeps moving …….

N.B. if the person is giving the directions is a young child then give them a little leeway. However, they will soon realise that the "robot" needs precise instructions when the "robot" walks into a wall (carefully!) or a table. They will learn quickly how far one step is for the robot. Allow phrases like "grab the book" and don't expect every finger to be given a separate instruction.

N.B. a real robot would need every finger of its robot hand to be coded. Imagine how long it takes to code a car-making robot!